

REMARKS/ARGUMENTS

Reconsideration and withdrawal of all outstanding grounds of rejection are respectfully requested in light of the above amendments and the remarks that follow.

At the outset, claims 1-5 have been cancelled, leaving claims 6-11 as amended herewith for continued examination in this application.

The Examiner has rejected claims 8, 10 and 11 under 35 U.S.C. 102 as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over Cooper et al. The newly cited Cooper patent (U.S. 6,676,912) discloses a method for removing NO_x from gas streams emanating from stationary combustion sources in manufacturing plants.

For claim 8, the Examiner relies on Column 8 of Cooper where it is disclosed that the pH of the scrubbing liquor may be adjusted via the addition of an alkaline material such as potassium hydroxide.

On closer inspection, it does not appear that Cooper discloses or suggests the end product of this invention, i.e., a potassium nitrate (KNO₃) fertilizer. In fact, Cooper merely suggests that the scrubbing liquor 70 may be water or may include an alkaline material (such as potassium hydroxide) to control the liquor at a particular pH value, for example, within a range of pH 4 to pH 10. Nowhere does Cooper disclose or suggest specifically the second step in independent claim 8 requiring the addition of sufficient potassium hydroxide in particulate form to generate a potassium nitrate fertilizer via the second stage reactions recited therein. Moreover, it does not appear that Cooper even suggests adding hydrogen peroxide in amounts necessary to generate the first set of

reactions in subparagraphs (a) of independent claim 8, noting the specifically disclosed reactions in column 5 of Cooper (see reactions 1, 2 and 3 at the top of column 5).

For the above reasons, it is respectfully submitted that Cooper neither discloses or suggests the subject matter of claims 8, 10 and 11 as amended herewith.

The Examiner has rejected claims 3, 6, 7 and 9 under 35 U.S.C. 103 as unpatentable over Cooper and further in view of Jones '298. With respect to independent claim 6, the teaching in Jones to introduce hydrogen peroxide in aerosol form does not remedy the deficiencies in Cooper explained hereinabove. Accordingly, no combination of Cooper and Jones is sufficient to conclude obviousness with respect to the claimed method that produces potassium nitrate fertilizer as a byproduct generated by the specific reactions recited in independent claim 6 (or 8). It follows that the rejection of remaining dependent claims 7 and 9 should also now be withdrawn.

The Examiner has rejected claims 1 and 5 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over, the newly cited DE4216772 reference. The cancellation of claims 1-5 has rendered this ground of rejection moot.

The further rejection of claim 3 as unpatentable over DE '772 in view of Jones has also been rendered moot by the cancellation of that claim.

The Examiner has rejected claims 8, 10 and 11 under 35 U.S.C. 103 as unpatentable over DE '772 and further in view of Cooper.

The '772 reference suggests only that hydrogen peroxide be injected into the purified gas to oxidize NO to NO₂, and that the NO₂ or HNO₃ formed is then reacted with CA (OH) to powder and separated as nitrate mixed with CA (OH)₂. Nowhere does the '772 reference disclose the formation of a potassium nitrate fertilizer as a byproduct of the reactions utilized to reduce NO_x emissions. Cooper is relied upon merely for teaching the introduction of potassium hydroxide in particulate form. Accordingly, the rejection as it applies to remaining claims 8, 10 and 11 is clearly improper and should be withdrawn.

The Examiner has rejected claims 6, 7 and 9 under 35 U.S.C. 103 as unpatentable over DE '772 in view of Jones and further in view of Cooper. The combination of these references, for the reasons already stated above, is insufficient to evidence the obviousness of claims 6, 7 and 9.

The application is now believed to be in condition for allowance, and early passage to issue is requested. In any event, should any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

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Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

A handwritten signature in black ink, appearing to read "Michael J. Keenan", written over a horizontal line.

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